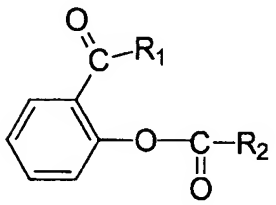
Claims

What is claimed is:

1. A process for the production of an aromatic polycarbonate, the process comprising adding to a polycarbonate oligomer reaction mixture under melt conditions an amount of a terminal blocking agent of the following formula:



to form a polycarbonate having an increased level of capped or blocked hydroxy groups, wherein at least 80% of the blocking agent is added after the oligomer has reached a number-average molecular weight Mn of about 2,500 to 15,000 Dalton, and wherein R_1 is a propoxy or butoxy and R_2 is selected from the group consisting of C_1-C_{30} alkyl, C_1-C_{30} alkoxy, C_6-C_{30} aryl, C_7-C_{30} aralkyl, and C_6-C_{30} aryloxy.

2. The process of claim 1, wherein R_2 is substituted with a member selected from the group consisting of propoxycarbonyl, butoxycarbonyl, 2-(propoxycarbonyl)phenyloxycarbonyl, 2-(butoxycarbonyl)phenyloxycarbonyl, 2-(propoxycarbonyl)phenyloxycarbonyloxy, and 2-(butoxycarbonyl)phenyloxycarbonyloxy groups or mixtures thereof.

3. The process of claim 1, wherein R1 is n-propoxy or butoxy.

4. The process of claim 1, wherein R2 is selected from the group consisting of stearyl, phenyl, para-t-butyl-phenyl, phenoxy, para-tert-butylphenoxy, para-octylphenoxy, para-nonylphenoxy, para-dodecylphenoxy, 3-pentadecylphenoxy, para-octadecylphenoxy, para-cumylphenoxy, or mixtures thereof.

5. The process according to claim 1, wherein the terminal blocking agent is added in an amount of about 0.1 to 1.5 mole based on 1 mole equivalent of the free terminal –OH groups of the polycarbonate at the time of the addition.

6. The process according to claim 5, wherein the terminal blocking agent is added in an amount of about 0.8 to 1.3 mole equivalent per mole of the free terminal –OH groups of the polycarbonate at the time of the addition.

7. The process according to claim 1, further comprising adding to the polycarbonate under melt conditions a coupling agent select from the group consisting of: bis-alkylsalicyl carbonate, bis(2-benzoylphenyl) carbonate, BPA-bis-2-alkoxyphenylcarbonate, BPA-bis-2-aryloxyphenylcarbonate, BPA-bis-2-benzoylphenylcarbonate and mixtures thereof.

8. The process according to claim 1, wherein the formed polycarbonate has a content of ortho-substituted phenols generated in the terminal blocking reaction of 500 ppm or below.

9. The process according to claim 1, wherein the formed polycarbonate has a content of ortho-substituted phenols generated in the terminal blocking reaction of 100 ppm or below.

10. The process according to claim 1, wherein the formed polycarbonate has a content of terminal blocking agent of 500 ppm or below.

11. The process according to claim 1, wherein the formed polycarbonate has a content of terminal blocking agent of 100 ppm or below.

12. The process according to claim 1, wherein the formed polycarbonate has a content of terminal 2-(alkoxycarbonyl)phenyl groups of 2,500 ppm or below.

13. The process according to claim 1, wherein the formed polycarbonate has a content of terminal 2-(propoxycarbonyl)phenyl groups of 1,000 ppm or below.